

# Upper San Antonio River: LID Demonstration at River Authority Facilities

Water Body Upper San Antonio River (1911)

**Location** San Antonio

River Basin San Antonio River (18)

Contractor San Antonio River Authority

Project Period September 28, 2015 to February 28, 2018

Project Total \$833,333 (Federal 60% and Local Match 40%)

## **Background**

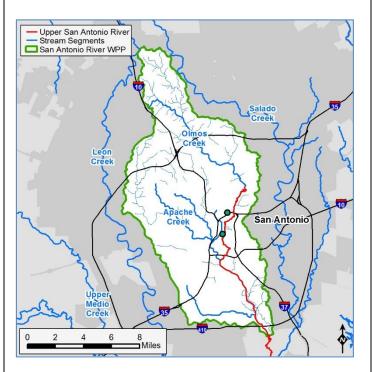
Portions of the Upper San Antonio River (segment 1911) have been impaired for elevated bacteria concentrations since 2000. In 2006, the San Antonio River Authority (SARA) completed the Upper San Antonio River Watershed Protection Plan (USAR WPP), and in 2007 the TCEQ adopted a total maximum daily load (TMDL) addressing this segment. The USAR WPP was updated in 2014 and the update was approved by EPA in 2015.

### **Project Description**

The USAR WPP recommends a 30% reduction in bacteria loading from stormwater to bring the river into compliance with state water quality standards. The low impact development (LID) best management practices (BMPs) this project will install are identified in the USAR WPP. This project is designed to demonstrate the feasibility of LID retrofit projects in a heavily urbanized area. SARA's Guenther and Euclid properties have limited right-of-way, requiring strategic selection, placement, and design of BMPs. Runoff sampling at these sites show high bacteria concentrations and other constituents of concern, including nutrients. LID retrofits at the Guenther site consist of nine bioretention cells, with a total capacity of over 40,000 gallons, and five cisterns (total capacity of 10,000 gallons) connected to an irrigation system.

### **Current Status**

Construction of the BMPs is complete. Tours and workshops have been conducted at the properties, permanent signage is in preparation, and monitoring of water quality benefits began in January 2017 and will continue through November.



## **Public Participation**

The Bexar Regional Watershed Management – Water Quality Focus Group provides a forum for discussion of the continuing implementation and updates to the USAR WPP, which includes this project.

#### For More Information

#### **TCEQ Project Manager**

Bill Carter

512.239.6771; bill.carter@tceq.texas.gov

#### San Antonio River Authority Project Manager

Aarin Teague

210.302.3660;ateague@sara-tx.org

## **Project Highlights**

- 09/2015 Contract executed.
- 11/2015 Post Award Meeting held.
- 12/2015 QAPP Planning Meeting held.
- 03/2016 Final Designs for all BMPs completed.
- 06/2016 Draft QAPP for BMP monitoring submitted.
- 07/2016 Subcontract for BMP construction and supervision awarded.
- 08/2016 Report on Triple Bottom Line analysis of BMP options submitted.
- 11/2016 Hard Hat Tour of LID construction conducted.
- 12/2016 Draft O&M Procedures for BMPs submitted.
- 03/2017 First Data Submission.
- 03/2017 Photo-documentation of all BMPs submitted.
- 05/2017 Record drawings (as-built) for all BMPs submitted.
- 08/2017 Second data submission.
- 08/2017 First LID Construction Workshop conducted.
- 09/2017 Designs for permanent signage submitted.